CLAIMS

We claim:

1. A transgenic mouse whose genome comprises a disruption in an endogenous CXCR6 gene, wherein the transgenic mouse lacks production of functional CXCR6, and exhibits a phenotypic abnormality.
2. The transgenic mouse of claim 1, wherein the disruption in the endogenous CXCR6 gene is homozygous.
3. The transgenic mouse of claim 1, wherein the disruption in the endogenous CXCR6 gene is heterozygous.
4. A cell or tissue obtained from the transgenic mouse of claim 1.
5. A transgenic mouse comprising a heterozygous disruption in an endogenous CXCR6 gene, wherein the disruption in a homozygous state inhibits production of functional CXCR6 resulting in a transgenic mouse exhibiting a phenotypic abnormality.
6. A method of producing a transgenic mouse comprising a disruption in an endogenous CXCR6 gene, the method comprising:
   (a) providing an murine embryonic stem cell comprising a disruption in an endogenous CXCR6 gene; and
   (b) introducing the murine stem cell into a pseudopregnant mouse, wherein the pseudopregnant mouse gives birth to a transgenic mouse;

   wherein the transgenic mouse lacks production of functional CXCR6 and exhibits a phenotypic abnormality.
7. The transgenic mouse produced by the method of claim 6.
8. A targeting construct comprising:
   (a) a first polynucleotide sequence homologous to at least a first portion of an endogenous CXCR6 gene;
   (b) a second polynucleotide sequence homologous to at least a second portion of the endogenous CXCR6 gene; and
   (c) a selectable marker located between the first and second polynucleotide sequences;

wherein the targeting construct, when introduced into a murine embryonic stem cell produces a murine embryonic stem cell comprising a disruption in the endogenous CXCR6 gene.

9. A murine embryonic stem cell comprising a disruption in an endogenous CXCR6 gene, the disruption produced using the targeting construct of claim 8.